

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 4239-68223	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2004/010588	International filing date (day/month/year) 05/04/2004	(Earliest) Priority Date (day/month/year) 08/04/2003
Applicant THE GOVERNMENT OF THE UNITED STATES OF AMERICA		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 7 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☒ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☒ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

GENE EXPRESSED IN PROSTATE CANCER, METHODS AND USE THEREOF

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 1

☐ as suggested by the applicant.

☒ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

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Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
- a. type of material
- ☒ a sequence listing
- ☐ table(s) related to the sequence listing
- b. format of material
- ☒ in written format
- ☒ in computer readable form
- c. time of filing/furnishing
- ☒ contained in the international application as filed
- ☒ filed together with the international application in computer readable form
- ☐ furnished subsequently to this Authority for the purpose of search
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C07K14/47 G01N33/574		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 C07K G01N		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, BIOSIS, WPI Data, Sequence Search, MEDLINE, PAJ, EMBASE		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99/67384 A (SPRINZAK EINAT A ; INCYTE PHARMA INC (US); KLINGLER TOD M (US); VOLKMU) 29-December-1999-(1999-12-29) ✓ abstract sheet 4/8, SEQ ID NO:5	1-46
X	DATABASE EMBL 5 March 2003 (2003-03-05), "Homo sapiens prostate cancer associated protein 5, mRNA (cDNA clone IMAGE:5203095), partial cds." XP002296003 retrieved from EBI Database accession no. BC047903 abstract ----- -/--	1-46
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
* Special categories of cited documents : *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family		
Date of the actual completion of the international search		Date of mailing of the international search report
13 September 2004		24/09/2004
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Grötzinger, T

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE EMBL 13 February 2002 (2002-02-13), "DNA encoding novel human diagnostic protein #15479." XP002296004 retrieved from EBI ✓ Database accession no. AAS79675 abstract	1,4,6
X	& WO 01/75067 A (HYSEQ INC ; LIU CHENGHUA (US); TANG Y TOM (US); DRMANAC RODOJE T (US)) 11 October 2001 (2001-10-11) ✓	1,4,6
X	DATABASE EMBL 18 February 2002 (2002-02-18), "Novel human diagnostic protein #15479." XP002296005 retrieved from EBI ✓ Database accession no. ABG15488 abstract	1,4,6
X	& WO 01/75067 A (HYSEQ INC ; LIU CHENGHUA (US); TANG Y TOM (US); DRMANAC RODOJE T (US)) 11 October 2001 (2001-10-11) ✓	1,4,6
X	DATABASE EMBL 23 September 2002 (2002-09-23), "Human PSNA cDNA #11" XP002296006 retrieved from EBI ✓ Database accession no. AAD38831 abstract	1-46
X	& WO 02/24718 A (ALI SHUJATH ; RECIPON HERVE (US); DIADEXUS INC (US); SUN YONGMING (US)) 28 March 2002 (2002-03-28) ✓	1-46
X	DATABASE EMBL 23 September 2002 (2002-09-23), "Human prostate specific protein (PSP) #9." XP002296007 retrieved from EBI ✓ Database accession no. AAE24066 abstract	1-46
X	& WO 02/24718 A (ALI SHUJATH ; RECIPON HERVE (US); DIADEXUS INC (US); SUN YONGMING (US)) 28 March 2002 (2002-03-28) ✓	1-46
P,X	WO 03/042370 A (LEE BYUNGKOOK ; US GOVERNMENT (US); VINCENT JAMES (US); WOLFGANG CURT) 22 May 2003 (2003-05-22) ✓ SEQ ID NOs:1,2 ----- -/--	1-46

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Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	<p>BERA TAPAN K ET AL: "NGEP, a gene encoding a membrane protein detected only in prostate cancer and normal prostate." ✓ PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol. 101, no. 9, 2 March 2004 (2004-03-02), pages 3059-3064, XP002296002 ISSN: 0027-8424 abstract page 3063, right-hand column, paragraph 4 -----</p>	1-46

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

IC05 Rec'd PCT/US 00 OCT 2005
10/552515

1. ☒ Claims Nos.: 26-38, 42-44
because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 26 to 38, and 42 to 44 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

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Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9967384	A	29-12-1999	AU 4823599 A	10-01-2000
			CA 2331769 A1	29-12-1999
			EP 1088072 A2	04-04-2001
			JP 2002518048 T	25-06-2002
			WO 9967384 A2	29-12-1999
WO 0175067	A	11-10-2001	AU 3486501 A	14-08-2001
			AU 3995501 A	12-09-2001
			AU 4925101 A	15-10-2001
			AU 4972801 A	15-10-2001
			AU 5119401 A	15-10-2001
			AU 5521401 A	15-10-2001
			CA 2399681 A1	09-08-2001
			CA 2404501 A1	11-10-2001
			CA 2404555 A1	11-10-2001
			EP 1254266 A1	06-11-2002
			EP 1268762 A1	02-01-2003
			EP 1268510 A2	02-01-2003
			JP 2004502403 T	29-01-2004
			JP 2004500120 T	08-01-2004
			WO 0157266 A1	09-08-2001
			WO 0164839 A2	07-09-2001
			WO 0175067 A2	11-10-2001
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			WO 0174836 A1	11-10-2001
			WO 0175093 A1	11-10-2001
			US 2004048249 A1	11-03-2004
			US 2003092112 A1	15-05-2003
			US 2003087370 A1	08-05-2003
			US 2003096279 A1	22-05-2003
			US 2003235883 A1	25-12-2003
			US 6436703 B1	20-08-2002
			US 2002061567 A1	23-05-2002
			US 2003180722 A1	25-09-2003
			US 2002146757 A1	10-10-2002
WO 0224718	A	28-03-2002	AU 9284201 A	02-04-2002
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			US 2003031678 A1	13-02-2003
WO 03042370	A	22-05-2003	WO 03042370 A2	22-05-2003